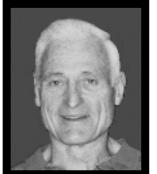
## **Record Setting Impressions by** Dick Hannula



Coach Dick Hannula is one of the most respected coaches in High School Swimming. He led his teams to many state championships and at one point had more than 200 consecutive wins. He has published many articles and videos on the sport of swimming.

When fast is really fast! The 50 yard free is now 18.47 and the 100 yard free is now 40.92. The world records are being demolished at the European Championship and the Australian Olympic Trials. It seems that it is happening at a rate reminiscent of the East German women's assault on World Records and then the Chinese women. We have known for some time that these records were the result of performance enhancing drugs. Why are we seeing such an assault on the world records and the United States Olympic Trials and the Olympics are still to come.

Assuming that the agencies in place to deter using performance enhancing drugs are being successful, the records then are the result of another avenue. Random drug testing is a great deterrent so the current fast swimming is most likely the result of some other improvement. Technique and training continue to improve but that can't have provided the entire current performance improvements. Improved swimming facilities and water turbulence control all play a small part over time as well.

The improved competitive swim suit design appears to be the best answer for these current major breakthroughs in swimming records. I personally believed that allowing the full body and long legged competitive suit should never have been approved. If it did what it was purported to do – to swim faster - then it was no longer a level playing field. Level if you reason that every swimmer in any race has the power to select to wear the suit. However, not level when world record and all record holders didn't swim in the same type of competition swim suit. How many age group and high school swimmers now have to purchase a competitive suit that costs several hundred dollars in order to compete on a level playing field. It would seem that the suit could have been illegal for at least 10 & under competition. That too is another story and just one more unfilled wish.

World Records create news stories and a lot of excitement. I believe that world records are the result of natural progressions. Too many and too many consistently will cheapen the accomplishment and eventually ignored. Baseball ignored the be performance enhancing drugs when home run records were being destroyed. It created a temporary euphoria and the pride that goes with those home run records has already reached a very low level of credibility. Should we be discussing placing an asterisk after world records to indicate which advanced model of racing suit was used in breaking that particular World or American record.

One day before the start of the NCAA Division I Men's Championship Meet in Federal Way, Washington, I was talking to Rick DeMont (assistant coach and sprint coach at the University of Arizona). He put it very well when he said, "It won't be long before the swimmer is determined by how fast he can drive the suit". Coach Frank Busch and Rick are to be congratulated for and women's collegiate their men championships. I only witnessed the men's meet, and Arizona peaked perfectly and performed consistently at their best through the meet.

The latest version of the fastest racing suit ever made wasn't allowed at the NCAA Men's Championship. However, it was used in both the Australian Olympic Trials and the European Championship Meet and both of these meet resulted in the very large number of new world records. It was my understanding that the suit is currently being examined to confirm that it meets the IOC competition suit standards. At this time, I don't know if that is in fact what is happening. I do believe the cat is out of the bag and the latest version will be approved. The scientific and technical improvements will continue with the competitive swim suit in the future. The current best model will be obsolete in a fairly short time and the prophecy that the future swimmer will be determined by how fast he can drive the swim suit could be a reality. At the minimum the sport gets more expensive for the parents of the 10 year old who will need the newest model when 11, and again when 12, and so on.

My observation at the NCAA Men's Championship was that the long legged and full body suit has changed competitive swimming. This isn't just now happening as we have had the trend for some time. A swimmer's legs are higher in the water with The angle of resistance is these suits. lessened. It happens in all of the strokes but I was particularly impressed in the 200 yard butterfly. It was most obvious here. The legs remain high in the water near the surface throughout the entire distance of the 200 fly. This appears to be happening with a less than maximum effort on the kick. The kick appears to be quite relaxed and maintains that efficiency through the entire 200 yards. This ability to ride high with the legs with less energy exertion assists swimmers to better close their races strongly. More distance per stroke and a more efficient energy production is the result.

I'm just pointing out that this trend of faster swim suit designs and materials will continue. I'm not lobbying for a change to go back to the swimming briefs popularly called "Speedo's". That would be futile in any event. I do believe that we opened a "pandora's box" when the suit changes were permitted. Another thing that became very apparent in the changing face of competitive swimming is that the swimming stroke isn't as important by itself as it once was. My point is that we once worked most of the time to improve swimming stroke technique. That was the major focal point. Now a champion swimmer must be able to not only swim well but must be a tremendous kicker too.

Great swimmers must be able to kick underwater fast and also swim on the surface fast. Both are required for success. Kicking drills and kicking speed must be developed and coaches must provide at least equal attention to kicking as well as the surface swimming.

It seems that the future champions are going to be really great kickers as they are being introduced to more underwater kicking at an early age. They can't help but be more efficient in their kicking starting at a much earlier age.

Bill Boomer sat a couple of rows behind me at the meet and we had time to visit briefly and discuss some of the trends. He raised some great questions. How long can the newest versions of long legged and full bodied suit be in the water before being neutralized or even being a handicap? Is there a number of minutes and/or seconds before the suit absorbs too much water? If a suit begins to absorb water at some point, the angle of the body in the water will change. The legs would begin to move lower in the water at that point. I'm pretty certain that the science of swim suit material and design will find the answers. In the meantime I will join the crowd and enjoy the record breaking spree.

## www.niscaonline.org